

# Inspector General

United States  
Department of Defense



American Recovery and Reinvestment Act--  
Department of the Navy Near Term Energy-Efficient  
Technologies Projects

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE <b>23 JUN 2011</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2011 to 00-00-2011</b>	
4. TITLE AND SUBTITLE <b>American Recovery and Reinvestment Act - Department of the Navy Near Term Enrgy-Efficient Technologics Projects</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>Department of Defense Inspector General,400 Army Navy Drive,Arlington,VA,22202-4704</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT  <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES  <b>60</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

### Additional Copies

To obtain additional copies of this report, visit the Web site of the Department of Defense Inspector General at <http://www.dodig.mil/audit/reports> or contact the Secondary Reports Distribution Unit at (703) 604-8937 (DSN 664-8937) or fax (703) 604-8932.

### Suggestions for Audits

To suggest or request audits, contact the Office of the Deputy Inspector General for Auditing by phone (703) 604-9142 (DSN 664-9142), by fax (703) 604-8932, or by mail:

ODIG-AUD (ATTN: Audit Suggestions)  
Department of Defense Inspector General  
400 Army Navy Drive (Room 801)  
Arlington, VA 22202-4704



### Acronyms and Abbreviations

AFMC	Air Force Materiel Command
ASN (FM&C)	Assistant Secretary of the Navy (Financial Management and Comptroller)
BAA	Broad Agency Announcement
BOA	Basic Ordering Agreement
BPA	Blanket Purchase Agreement
DLA	Defense Logistics Agency
DON	Department of the Navy
FAR	Federal Acquisition Regulation
FBO	Federal Business Opportunities
FPDS	Federal Procurement Data System
FSRM	Facilities Sustainment, Restoration, and Modernization
HQMC	Headquarters, Marine Corps
HVAC	Heating, Ventilating, and Air-Conditioning
MARCORSYSCOM	Marine Corps Systems Command
NAVAIR	Naval Air Systems Command
NAVFAC	Naval Facilities Engineering Command
NAVSEA	Naval Sea Systems Command
NAWCAD	Naval Air Warfare Center, Aircraft Division-Lakehurst
NAWCWD	Naval Air Warfare Center Weapons Division
NSWCCD/HQ	Naval Surface Warfare Center, Carderock Division-Headquarters
NSWCCD/SSES	Naval Surface Warfare Center, Carderock Division-Ships System Engineering Station

NTEET	Near Term Energy-Efficient Technologies
OMB	Office of Management and Budget
ONR	Office of Naval Research
OTEC	Ocean Thermal Energy Conversion
RDT&E	Research, Development, Testing, and Evaluation
RFP	Request for Proposal
RFQ	Request for Quote
USACE	U.S. Army Corps of Engineers

THIS PAGE INTENTIONALLY LEFT BLANK





INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-4704

June 23, 2011

MEMORANDUM FOR DISTRIBUTION

SUBJECT: American Recovery and Reinvestment Act—Department of the Navy Near Term Energy-Efficient Technologies Projects (Report No. D-2011-076)

We are providing this report for review and comment. The Navy properly justified and adequately planned and funded the 11 Near Term Energy-Efficient Technologies (NTEET) projects we reviewed. However, the Navy, Marine Corps, and Air Force could have improved NTEET project contracting and transparency.

We considered management comments on a draft of this report from various Navy, Marine Corps, and Air Force offices and commands including (but not limited to) the Assistant Secretary of the Navy (Research, Development, and Acquisition); the Marine Corps Systems Command; and the Air Force Materiel Command.

DoD Directive 7650.3 requires that recommendations be resolved promptly. As a result of management comments, we deleted draft Recommendations 2, 4, and 7.a. We renumbered draft Recommendation 3 as Recommendation 2. We also renumbered draft Recommendation 5 as Recommendation 3 and revised and renumbered draft Recommendation 6 as Recommendation 4. Further, we revised and renumbered draft Recommendation 7.b as Recommendation 5. The Navy and Marine Corps comments to final report recommendations were responsive, and no further comments are required. Air Force comments to final Recommendation 5 were partially responsive. We modified the recommendation and request that the Air Force provide further comments by July 25, 2011.

If possible, send a .pdf file containing your comments to [audacm@dodig.mil](mailto:audacm@dodig.mil). Copies of your comments must have the actual signature of the authorizing official for your organization. We are unable to accept the /Signed/ symbol in place of the actual signature. If you arrange to send classified comments electronically, you must send them over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the staff. Please direct questions to me at (703) 604-9071 (DSN 664-9071).

A handwritten signature in black ink, appearing to read "Bruce A. Burton", is positioned above the printed name.

Bruce A. Burton  
Deputy Assistant Inspector General  
Acquisition and Contract Management

DISTRIBUTION:

UNDER SECRETARY OF DEFENSE (COMPTROLLER)/CHIEF FINANCIAL  
OFFICER  
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING  
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT AND  
COMPTROLLER)  
ASSISTANT SECRETARY OF THE NAVY (RESEARCH, DEVELOPMENT, AND  
ACQUISITION)  
ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT  
AND COMPTROLLER)  
DIRECTOR, DEFENSE LOGISTICS AGENCY  
NAVAL INSPECTOR GENERAL  
COMMANDER, NAVAL AIR SYSTEMS COMMAND  
COMMANDER, NAVAL SURFACE WARFARE CENTER, CARDEROCK  
DIVISION-HEADQUARTERS  
COMMANDER, NAVAL SURFACE WARFARE CENTER, CARDEROCK  
DIVISION-SHIPS SYSTEMS ENGINEERING STATION  
COMMANDER, MARINE CORPS SYSTEMS COMMAND  
COMMANDER, AIR FORCE MATERIEL COMMAND



# Results in Brief: American Recovery and Reinvestment Act—Department of the Navy Near Term Energy-Efficient Technologies Projects

## What We Did

We reviewed the planning, funding, and initial execution (contracting) of 11 Department of the Navy (DON) Near Term Energy-Efficient Technologies (NTEET) program research and development projects, to determine whether contracting efforts complied with Recovery Act requirements, other Federal requirements, and DoD implementing guidance. As of July 31, 2010, the Navy, Marine Corps, Air Force, and Defense Logistics Agency awarded 35 contract actions for the 11 Navy projects, valued at \$55.5 million of the \$72.9 million available NTEET program Recovery Act funds. Eight contract actions were new contracts, 9 were orders placed against existing contracts, and the remaining 18 were modifications to existing contracts.

## What We Found

The DON properly justified and adequately planned and funded the 11 NTEET projects. However, the Navy, Marine Corps, and Air Force could have improved initial execution by:

- properly posting presolicitation or award notices for 8 contract actions on Federal Business Opportunities (FBO) Web site,
- including at least one missing Federal Acquisition Regulation (FAR) Recovery Act contract clause in 8 contract actions, and
- describing the work to be performed in public notifications for 2 contract actions on FBO Web site.

The Navy, Marine Corps, and Air Force did not post presolicitations or award notices, include required FAR Recovery Act clauses in the contract actions, or properly describe the work to

be performed in the presolicitations or award notices posted on FBO because contracting officials modified previously negotiated non-Recovery Act contract actions and were unaware that Recovery Act funds required the clauses. As a result, transparency was not achieved.

## What We Recommend

We recommend that the Assistant Secretary of the Navy (Research, Development, and Acquisition) direct contracting offices to properly post presolicitation and award notices. We also recommend that the Navy, Marine Corps, and the Air Force modify contract actions to include appropriate Recovery Act FAR clauses, report all Recovery Act actions to the required public Web sites, and modify presolicitation notifications to include appropriate descriptions of work to be performed.

## Management Comments and Our Response

The Navy comments regarding properly posting presolicitation and award notices were partially responsive. As no future Navy NTEET contracting actions appear likely, we see no benefit to pursuing further Navy comments. Other Navy and Marine Corps comments were responsive to the final report recommendations. We request that the Air Force provide additional comments by July 25, 2011, regarding an open recommendation to modify contract actions to include appropriate Recovery Act FAR clauses. As a result of management comments, we deleted three draft report recommendations, renumbered two draft report recommendations, and revised and renumbered two other draft report recommendations. Please see the recommendations table on the back of this page.



## Recommendations Table

Management	Recommendations Requiring Comment	No Additional Comments Required
Assistant Secretary of the Navy (Research, Development, and Acquisition)		1
Commander, Naval Air Warfare Center, Aircraft Division		2
Commander, Naval Surface Warfare Center, Carderock Division-Ships System Engineering Station		3
Commander, Marine Corps Systems Command		4
Commander, Air Force Materiel Command	5	

**Please provide comments by July 25, 2011.**

# Table of Contents

<b>Introduction</b>	1
Objective	1
Recovery Act Background	1
Recovery Act Requirements	1
Recovery Act and Other Federal Contracting Requirements	2
OMB Recovery Act Guidance	3
DoD Recovery Act Program Plans	3
Review of Internal Controls	5
<b>Finding. DON NTEET Program Implementation</b>	7
Projects Were Properly Planned	7
DON Promptly Distributed NTEET Program Funding	7
DON NTEET Contract Actions Were Generally Competed	8
Use of Multiple Contract Types	9
DON Needs to Improve Transparency of NTEET Contracting	9
Conclusion	11
Management Comments on the Report	12
Recommendations, Management Comments, and Our Response	12
<b>Appendices</b>	
A. Scope and Methodology	17
Use of Computer-Processed Data	18
Prior Coverage	18
B. Recovery Act Criteria and Guidance	19
C. DoD Near Term Energy-Efficient Technologies Program Funding and Functional Areas	21
D. Description and Status of DON Near Term Energy-Efficient Technologies Projects	23
E. Management Comments on the Report and Our Response	27
F. DON Near Term Energy-Efficient Technologies Contracts	29
<b>Management Comments</b>	
Department of the Navy	34
Department of the Air Force	47

THIS PAGE INTENTIONALLY LEFT BLANK

# Introduction

## Objective

The primary objective of the audit was to determine whether DoD and its Components were planning and implementing the American Recovery and Reinvestment Act of 2009 (Recovery Act) by meeting the requirements in the Recovery Act; Office of Management and Budget (OMB) Memorandum M-09-10, “Initial Implementing Guidance for the American Recovery and Reinvestment Act of 2009,” February 18, 2009; and subsequent related guidance. For this audit, we reviewed the planning, funding, and initial execution (contracting) of 11 Near Term Energy-Efficient Technologies (NTEET) program research and development projects, to determine whether Department of the Navy (DON) efforts complied with Recovery Act requirements, OMB guidance, the Federal Acquisition Regulation (FAR), and DoD implementing guidance. See Appendix A for a discussion of our scope and methodology.

## Recovery Act Background

The President signed the Recovery Act into law on February 17, 2009. It was an unprecedented effort to jump-start the economy and create or save jobs.

The purposes of this Act include the following:

- (1) To preserve and create jobs and promote economic recovery.
- (2) To assist those most impacted by the recession.
- (3) To provide investments needed to increase economic efficiency by spurring technological advances in science and health.
- (4) To invest in transportation, environmental protection, and other infrastructure that will provide long-term economic benefits.
- (5) To stabilize State and local government budgets, in order to minimize and avoid reductions in essential services and counterproductive state and local tax increases.

... the heads of Federal departments and agencies shall manage and expend the funds made available in this Act so as to achieve the purposes specified ... including commencing expenditures and activities as quickly as possible consistent with prudent management.

## Recovery Act Requirements

The Recovery Act and implementing OMB guidance require projects to be monitored and reviewed. We grouped these requirements into the following four phases: (1) planning, (2) funding, (3) initial execution, and (4) tracking and reporting. The Recovery Act requires that projects be properly planned to ensure the appropriate use of funds. Review of the funding phase is to ensure the funds were distributed in a prompt, fair, and reasonable manner. Review of the initial execution phase is to ensure that contract actions awarded with Recovery Act funds were transparent, competed, and contained specific FAR clauses; that Recovery Act funds were used for authorized purposes; and that instances of fraud, waste, error, and abuse were mitigated. Review of the execution phase also ensures that program goals were achieved, including specific program outcomes and improved results on broader economic indicators; and that projects funded avoided unnecessary delays and cost overruns. Review of the tracking and reporting

phase ensures that the recipients' use of funds was transparent to the public and that benefits of the funds were clearly, accurately, and timely reported.

## **Recovery Act and Other Federal Contracting Requirements**

The Recovery Act establishes transparency and accountability requirements. Federal Acquisition Circular 2005-32, March 31, 2009, provides policies and procedures for the Government-wide implementation of the Recovery Act and guidance on special contract provisions. Federal Acquisition Circular 2005-32 amended the FAR and provided interim rules that made FAR solicitation provisions and contract clauses immediately available for inclusion in contracts for Recovery Act work.

The specific FAR Recovery Act requirements are for:

- buying American construction material,\*
- protecting contractor whistleblowers,
- publicizing contract actions,
- reporting, and
- giving the Government Accountability Office and agency Inspectors General access to contracting records.

Federal Government organizations meet requirements for Recovery Act contract actions by posting information on the Federal Business Opportunities (FBO) and Federal Procurement Data System (FPDS) Web sites. FAR Subpart 5.7, "Publicizing Requirements Under the American Recovery and Reinvestment Act of 2009," directs contracting officers to use the Government-wide FBO Web site (<http://www.fbo.gov>) to:

- identify the action as funded by the Recovery Act,
- post pre-award notices for orders exceeding \$25,000,
- describe supplies in a clear narrative to the general public, and
- provide the rationale for awarding any contracting actions that were not both fixed-price and competitive.

FBO is the Federal Government's central source of Federal procurement opportunities. FBO is a Web-based portal that allows agency officials to post Federal procurement opportunities and contractors to search and review those opportunities. Agencies also post contract award notices on FBO. In addition, to provide transparency, FBO has a separate section identifying Recovery Act opportunities and awards.

FPDS is the Federal Government's central source of procurement information. Contracting officers enter information, to include the Treasury Account Symbol, in the

---

\* FAR 25.6, "American Recovery and Reinvestment Act–Buy American Act–Construction Materials," is not applicable to DON Recovery Act NTEET projects because these projects are research and development, not construction.



FPDS for all Recovery Act contract actions. The Treasury Account Symbol enables FPDS to provide transparency by generating and posting a report containing all Recovery Act contract actions.

OMB Memorandum M-09-15, “Updated Implementing Guidance for the American Recovery and Reinvestment Act of 2009,” April 3, 2009, requires specific posting requirements for modifications as well as orders under task and delivery order contracts. On April 21, 2009, the office of Defense Procurement and Acquisition Policy (DPAP) issued updated Recovery Act contracting instructions requiring contracting offices to post presolicitation and award notices for modifications or orders under existing contracts. On March 19, 2010, DPAP further revised the guidance to rescind the presolicitation requirement as it related to contract modifications to existing contracts.

FAR 5.704, “Publicizing-preaward,” directs users to FAR 5.201, which states that for acquisitions of supplies and services, the contracting officer must post a notice to the Government Point of Entry system for modifications to an existing contract. However, this section of the FAR was amended in July 2010 to exclude modifications from the presolicitation FBO posting requirement.

FAR Part 6, “Competition Requirements,” describes the steps necessary to keep competition full and open to all sources. FAR Part 6 includes Section 6.1, “Full and Open Competition” and Section 6.2, “Full and Open Competition After Exclusion of Sources.” Section 6.2 allows an agency to exclude a particular source when doing so would ultimately benefit the agency more than if competition were full and open. FAR 6.302, “Other Than Full and Open Competition,” allows for sole-source contracting when “only one responsible source and no other supplies or services will satisfy agency requirements.”

## **OMB Recovery Act Guidance**

Criteria for planning and implementing the Recovery Act continue to change as OMB issues additional guidance and DoD and the Components issue their implementation guidance. OMB has issued 11 memoranda and 1 bulletin to address the implementation of the Recovery Act. See Appendix B for Recovery Act criteria and guidance.

## **DoD Recovery Act Program Plans**

Under the Recovery Act, Congress appropriated approximately \$12 billion to DoD for the following programs: Energy Conservation Investment; Facilities Sustainment, Restoration, and Modernization (FSRM); Homeowners Assistance; Military Construction; NTEET; and U.S. Army Corps of Engineers (USACE) Civil Works.

**Table 1. DoD Agency-Wide and Program-Specific Recovery Act Programs**

<b>Program</b>	<b>Amount (in millions)</b>
Energy Conservation Investment	\$120
Facilities Sustainment, Restoration, and Modernization	4,260*
Homeowners Assistance	555
Military Construction	2,185
Near Term Energy-Efficient Technologies	300
U.S. Army Corps of Engineers Civil Works	4,600
<b>Total</b>	<b>\$12,020*</b>

\*On August 10, 2010, Public Law 111-226, Title III, “Rescissions,” rescinded \$260.5 million of funds from DoD Operations and Maintenance Accounts and Defense Health Program Account supporting the Recovery Act. This reduced the DoD Recovery Act FSRM amounts to approximately \$4 billion and total DoD Agency-wide and Program-Specific Recovery Act program funding to approximately \$11.76 billion.

The Recovery Act divides the approximately \$12 billion among 32 DoD and USACE line items of appropriations.

### ***DoD NTEET Program Planning***

Under the Recovery Act, Congress appropriated \$300 million for DoD Research, Development, Test, and Evaluation (RDT&E) in four accounts of \$75 million each for Army, Navy, Air Force, and Defense-wide NTEET Recovery Act projects. Each Military Department and Defense agency submitted RDT&E candidate projects for review in five broad areas:

- fuel optimization for mobility platforms,
- facility energy initiatives,
- operational efficiencies and commercial practices,
- domestic energy supply and distribution, and
- tactical power systems and generators.

See Appendix C for a further description of each of these five program areas.

### ***Research and Development Contracting***

The primary purpose of contracted research and development programs is to advance scientific and technical knowledge and apply that knowledge to achieve agency and national goals. Unlike contracts for other services and supplies, most research and development contracts contain objectives for which the work or method cannot be precisely described in advance. Although the Government prefers to use fixed-price contracts, they do not usually apply to research and development contracting, where specifications and cost estimates are usually not precise enough to permit a fixed-price preference. Therefore, the DoD NTEET Program Plan, May 15, 2009, forecasted a smaller percentage of fixed-price contract actions for anticipated Recovery Act NTEET program projects than for other Recovery Act project categories.

FAR Part 35, “Research and Development Contracting,” states that the broad agency announcement (BAA) is used by agencies to fulfill their requirements for scientific study and experimentation directed toward advancing the state of the art or increasing knowledge or understanding rather than focusing on a specific system or hardware solution. A BAA is used when proposals with varying technical or scientific approaches can be reasonably anticipated. A BAA describes the agency’s research interest in an individual program requirement or in broadly defined areas of interest covering the full range of an agency’s requirements.

FAR 15.203, “Request for Proposals,” states that requests for proposals (RFPs) are used in negotiated acquisitions to communicate Government requirements to prospective contractors and to solicit proposals. An RFP describes the anticipated terms and conditions that will apply to the contract; information required to be in the offeror’s proposal; and factors and significant subfactors, and their relative importance, which will be used to evaluate the proposal.

FAR Part 8, “Required Sources of Supplies and Services,” states that the blanket purchase agreement (BPA) may be established by ordering activities under any schedule contract to fill repetitive needs for supplies or services. A BPA can be established with one or more schedule contractors. The number of BPAs to establish is within the discretion of the ordering activity to maximize the effectiveness of the BPAs. Each BPA addresses the frequency of ordering, invoicing, discounts, requirements, delivery locations, and time.

FAR 16.703, “Basic Ordering Agreements,” states that basic ordering agreements (BOAs) are used to expedite contracting for uncertain requirements for supplies or services when specific items, quantities, and prices are not known at the time of the agreement is executed, but a substantial number of requirements for the type of supplies or services covered by the agreement are anticipated to be purchased from the contractor. A BOA is not a contract.

The Navy used its own contracting offices as well as those from the Marine Corps, Air Force, and DLA to support the solicitation and award of 11 Navy NTEET projects. Appendix D contains more detail on the 11 projects. The Navy, Marine Corps, Air Force, and DLA used BAAs, BOAs, RFPs, RFQs, modifications, and sole-source justification techniques to solicit and award the NTEET projects. As of July 31, 2010, 11 NTEET projects had awarded a total of 35 contract actions, valued at \$55.5 million of the \$72.9 million in available Navy RDT&E Recovery Act funds.

## **Review of Internal Controls**

DoD Instruction 5010.40, “Managers’ Internal Control Program Procedures,” July 29, 2010, requires DoD organizations to implement a comprehensive system of internal controls to provide reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls. We identified an internal control weakness in

DON's posting of solicitation and award notices for NTEET program contract actions. We will provide copy of the final report to the senior official responsible for internal controls at the DON.

## **Finding. DON NTEET Program Implementation**

DON properly justified and adequately planned and funded 11 Recovery Act NTEET projects. However, the Navy, Marine Corps, and the Air Force could have improved initial execution of the projects by:

- properly posting presolicitation or award notices for 8 contract actions on the FBO Web site,
- including required FAR Recovery Act contract clauses in 8 contract actions, and
- describing the work to be performed for 2 contract actions on the FBO Web site.

The Navy, Marine Corps, and Air Force did not post presolicitations or award notices, and did not include required FAR Recovery Act clauses in the contract actions, or describe the work to be performed in the presolicitations or award notices posted on the FBO Web site because contracting officials modified previously negotiated non-Recovery Act contract actions and were unaware that Recovery Act funds required the clauses. Inclusion of all applicable Recovery Act clauses in contract actions informs contractors about reporting requirements and promotes compliance. As a result, DON did not achieve transparency in all its Recovery Act actions, which was a primary objective of the Recovery Act.

### **Projects Were Properly Planned**

The DoD Energy Security Task Force—including members from the Military Departments, Defense agencies, and the Office of the Secretary of Defense and chaired by the Director, Defense Research and Engineering—reviewed the NTEET projects. The DoD Energy Security Task Force selected 11 DON NTEET projects to reduce the Department's energy demand via increasing fuel efficiency or advancing new technologies related to alternative energy sources, shown in Table 2, based on their ability to satisfy DoD capability gaps, present opportunities for military applications, or spur initiatives within industry and DoD Components.

### **DON Promptly Distributed NTEET Program Funding**

The Office of the Under Secretary of Defense (Comptroller/Chief Financial Officer) personnel released funds totaling \$75 million appropriated in Recovery Act to the Assistant Secretary of the Navy (Financial Management and Comptroller) (ASN(FM&C)) on March 10, 2009. The ASN (FM&C) personnel properly distributed Recovery Act funds to the Navy Commands on March 20, 2009. Of the \$75 million, the Navy Commands were provided \$72.9 million in funding for the 11 DON NTEET projects. On April 16, 2009, the Comptroller, Office of Naval Research, appropriated \$2.1 million to finance Navy NTEET set-aside requirements for Small Business Innovative Research (\$1.875 million) and Small Business Technology Transfer (\$225,000) projects. We reviewed funding and contracting documentation for the 11 DON NTEET projects. DON contracting officials promptly and fairly distributed



Recovery Act funds, meeting the Recovery Act goals for the NTEET projects. DON personnel began the process to award contract actions within days of receiving Recovery Act funds.

**Table 2. DON NTEET Recovery Act Projects Funded by RDT&E Appropriation**

Project	Command/Headquarters	Amount (in millions)
1. Improved Environmental Control Equipment	HQMC	\$3.402
2. Ocean and Wave Energy Utilization-OTEC	NAVFAC	8.554
3. Alternative Test Fuel and Cert Protocol Acceleration	NAVAIR	5.152
4. Plasma Fusion (Polywell)	ONR	1.944
5. Integrated Generator/Environmental Control	HQMC	2.430
6. On-Board Vehicle Power	HQMC	3.888
7. F-18 Engine Efficiency Improvements	NAVAIR	15.552
8. Aircraft Energy Conservation RDTE Program	NAVAIR	1.458
9. Hybrid Electric Drive System Development for Surface Combatants	NAVSEA	26.244
10. Advanced High Energy HVAC System	NAVSEA	2.624
11. Navy Shipboard Energy Program	NAVSEA	1.652
Subtotal		72.900
Small Business Innovative Research and Small Business Tech Transfer Set-Aside*	Various	2.100
<b>Total</b>		<b>\$75.000</b>

## DON NTEET Contract Actions Were Generally Competed

The Navy, Marine Corps, Air Force, and DLA executed 35 contract actions related to the 11 projects. See Appendix F for a summary of the issues on the 35 contract actions reviewed. According to FPDS, 18 of the 35 DON NTEET contract actions (51 percent) were solicited and awarded based on full and open competition; an additional 7 contract actions (20 percent) were solicited and awarded through full and open competition after exclusion of sources. For the remaining 10 contract actions (29 percent), contracting officials executed sole-source awards.

*... 18 of the 35 DON NTEET contract actions (51 percent) were solicited and awarded based on full and open competition.*

### Use of Modifications to Original Contracts

The Navy, Marine Corps, and Air Force used modifications to existing contracts for 18 of the 35 NTEET actions, valued at \$14.8 million. Of the 11 DON NTEET projects, 5 used modifications to existing contracts. The Navy awarded one modification for the F-18 Engine Efficiency Improvements. The Navy Shipboard Energy Program and Hybrid Electric Drive System Development for Surface Combatants had 2 and 13 modifications each issued against the original contracts, respectively. The Marine Corps awarded one

modification for the Integrated Generator/ Environmental Control project. The Air Force awarded one modification for the Aircraft Energy Conservation RDTE project.

### ***Use of Orders Against Established Contracts***

The Navy and Marine Corps placed orders against established contracts for 8 of the 35 NTEET actions, valued at \$13.9 million. Of the 11 DON NTEET projects, 4 used orders against established contracts. The Navy placed one order each for the F-18 Engine Efficiency Improvements, and Advanced High Energy HVAC System. The Alternative Test Fuel and Cert Protocol Acceleration and Improved Environmental Control Equipment had 3 and 4 orders each issued against the established contracts, respectively.

### ***Justified Sole-Source Contracts***

The Navy, Marine Corps, and Air Force used sole-source justifications for 10 contract actions, valued at \$21.4 million of Recovery Act funds. FAR 6.302 allows for the use of sole-source contracts when “only one responsible source and no other supplies or services will satisfy agency requirements.” All 10 contract actions included acceptable justification and approval documentation in the contract files, which cited the use of a sole-source contractor as the only existing responsible source. The Marine Corps used sole-source contracting for three contract actions on the Improved Environmental Control Equipment project. NAWCWD used one sole-source contract action for the Plasma Fusion (Polywell) project. Naval Sea Systems Command (NAVSEA) had one sole-source contract action for the Hybrid Electric Drive Systems Development for Surface Combatants. AFMC had one sole-source contract action for the Aircraft Energy Conservation RDTE project. NAVAIR issued four sole-source contract actions, two for the F-18 Engine Efficiency Improvements project and two for the Alternative Test Fuel and Cert Protocol Acceleration project.

### **Use of Multiple Contract Types**

The Navy, Marine Corps, Air Force, and DLA used different contract types for the 35 contract actions: 11 firm-fixed-price and 24 cost-plus-fixed-fee. Eleven contract actions, valued at \$14.4 million, were firm-fixed-priced. FAR 35.006, “Contracting Methods and Contract Type,” states that the absence of precise specifications and difficulties in estimating costs with accuracy normally preclude the use of fixed-price contracting for research and development; therefore, the use of cost-reimbursement contracts may be more appropriate. However, four DON projects’ specifications were sufficiently precise to allow for the award of the 11 firm-fixed-price contract actions. Twenty-four DON NTEET contract actions, valued at \$41 million, used a cost-plus-fixed-fee structure.

### **DON Needs to Improve Transparency of NTEET Contracting**

We found multiple instances in which public awareness was not achieved in DON project contract actions and solicitations. The problems included missing Recovery Act clauses in solicitations and contract actions and lack of public notification of contracts solicited

and awarded. See Appendix F for a summary of transparency problems for all 35 contract actions.

### ***Recovery Act Contract Clauses Were Missing***

The Navy, Marine Corps, and Air Force should have included FAR-required Recovery Act clauses for eight of the contract actions reviewed. For example, MARCORSYSCOM

*Navy, Marine Corps, and Air Force should have included FAR-required Recovery Act clauses for eight of the contract actions reviewed.*

had four contract actions that should have included appropriate FAR clauses for the Improved Environmental Control Equipment project and one contract action that should have included appropriate FAR clauses for the Integrated Generator/Environmental Control

project. MARCORSYSCOM did not include the clauses because contracting officers did not follow DoD and OMB guidance. MARCORSYSCOM contracting officials stated that required clauses were left out due to lack of contracting official oversight.

NSWCCD/SSES had one contract action that should have included appropriate FAR clauses for the Hybrid Electric Drive System Development for Surface Combatants project and NAWCAD had one contract action for the Alternative Test and Cert Protocol Acceleration project. One additional contract action for the NAVAIR-implemented Aircraft Energy Conservation RDTE Program did not include at least one required Recovery Act clause. NAVAIR used an AFMC contract to support the project. AFMC contracting officials stated that Recovery Act funds were not referenced on the purchase request. The AFMC contracting officials further stated that the purchase request was to fund a previously negotiated effort, which was not identified to the contracting office as a Recovery Act effort, and that the procurement contracting officer was unaware these were Recovery Act funds. AFMC should modify the noted contract actions to comply with Recovery Act contracting requirements.

### ***Public Awareness of NTEET Contracts Could Be Improved***

*Twenty-nine DON NTEET contract actions met transparency requirements.*

Twenty-nine DON NTEET contract actions met transparency requirements. Public awareness was not achieved for six contract actions, where contracting officials did not post a presolicitation, award notice, or

adequate project description on FBO. See Appendix F for a description of individual project transparency problems.

### ***Some Projects Lacked Recovery Act Solicitations***

Navy, Marine Corps, and Air Force officials did not post on the FBO Web site presolicitation notifications for four of the NTEET contract actions. According to FAR 5.7, "Publicizing Requirements Under the American Recovery and Reinvestment Act of 2009," the solicitation notifications must be posted. The transparency requirement was not achieved in cases where presolicitations were not posted on the FBO Web site. The Naval Surface Warfare Center, Carderock Division-Headquarters (NSWCCD/HQ) did not post a presolicitation notification for one of two Navy Shipboard Energy Program contract actions. NSWCCD/HQ contracting officials stated Recovery Act guidance had

not been fully implemented internally. NAVSEA officials noted to us that subsequent posting of the presolicitation notice was no longer required as a result of DoD guidance of March 19, 2010. However, the presolicitation requirement for the NSWCCD contract action was in place before the revised DoD guidance removing the requirement was issued. AFMC did not post a presolicitation notification for the Aircraft Energy Conservation RDTE Program. Also, MARCORSYSCOM did not post a presolicitation notification for two of the four contract actions for the Improved Environmental Control Equipment project.

### ***NTEET Projects Without Recovery Act Award Notices***

Navy and Marine Corps officials did not issue required FBO award notices for four contract actions: three from MARCORSYSCOM and one from NSWCCD/SSES. In addition, four award notices were not posted in a timely manner. NSWCCD/SSES posted the two award notices for one project 2 and 5 months, respectively, after contract award. The first contract action was awarded on June 17, 2009, and posted on November 19, 2009. The second was awarded on September 11, 2009, and posted on November 25, 2009. According to NSWCCD/SSES contracting officials, task orders against indefinite-delivery, indefinite-quantity multiagency contracts are exempt from synopsis requirements. NAVAIR contracting officials posted one award notice for one project 9 months after contract award. AFMC contracting officials posted one award notice for one project 1 year and 4 months after contract award. After we notified NAVAIR and AFMC contracting officials of the error, NAVAIR and AFMC contracting officials took corrective action by posting the two awarded on November 2, 2010, and November 3, 2010, respectively. Federal Government organizations must meet requirements for Recovery Act contract actions by posting information on the FBO, as directed by FAR Subpart 5.7.

### ***NTEET Projects Without Adequate Project Descriptions in FBO***

Two NTEET contract actions did not meet transparency requirements because they did not contain sufficient detail to provide the general public with a clear understanding for the purpose of the contract actions in support of the project. Marine Corps did not post adequate project descriptions in FBO, as directed by FAR Subpart 5.2, "Synopses of Proposed Contract Actions."

## **Conclusion**

Navy, Marine Corps, Air Force, and DLA officials generally used competitive contracting procedures awarding 35 actions, valued at approximately \$55.5 million, for 11 DON NTEET Recovery Act projects. We found eight contract actions that did not have a solicitation and/or an award notice posted on FBO. In addition, we found two solicitations and award notices where contracting officials did not facilitate transparency by providing detailed descriptions of the projects. Also, 8 of the 35 contract actions did not include at least one required FAR Recovery Act clause. We also found multiple instances where public awareness could have been increased in 5 of the 11 DON NTEET projects. Greater public awareness would have been achieved by improving contracting office oversight, posting presolicitations and award notices, including required FAR clauses in the contract actions, and describing the work to be performed in

the solicitations and award notices posted on FBO. Inclusion of all applicable Recovery Act clauses in contract actions informs contractors about reporting requirements and promotes compliance.

## **Management Comments on the Report**

The Navy, Marine Corps, and Air Force provided comments on our internal controls discussion, one finding discussion area, and our discussion of individual Navy NTEET projects in Appendix D. See Appendix E for a summary of those management comments and our response. See the Management Comments section of the report for the full text of the Navy, Marine Corps, and Air Force comments.

## **Recommendations, Management Comments, and Our Response**

### ***Deleted, Renumbered, and Revised Recommendations***

As a result of management comments, we deleted draft report Recommendations 2, 4, and 7.a. We renumbered draft Recommendation 3 as Recommendation 2. We also renumbered draft Recommendation 5 as Recommendation 3 and revised and renumbered draft Recommendation 6 as Recommendation 4. Further, we revised and renumbered draft Recommendation 7.b as Recommendation 5.

Responding for the Commander, NAVAIR, the Deputy Assistant Commander for Contracts disagreed with draft recommendations that the Commander direct the posting of information for contract action N00019-09-G-0009 (DO 0006) to include full justification for awards that are not fixed-price in FBO and other required Web sites, and the posting of contract action N00019-09-G-0009-0005-01 in the FPDS. The Deputy Assistant Commander also stated that a May 12, 2009, FPDS Contract Action Report for N00019-09-G-0009-0005-01 supported that the action was posted to FPDS the same day the modification was issued. After further review of the contract actions at issue, we agree with Deputy Assistant Commander comments that the pre-award and award notices for the contract actions were posted on public Web sites as required by FAR part 5. As a result, we deleted the recommendations from this report and revised the report discussion and summary report data to note the postings and addressed reasoning for awarding the order on a cost-plus-fixed-fee basis.

The Commander, NAVSEA, disagreed with draft Recommendation 4 that the Commander, NSWCCD/HQ, direct the posting of the presolicitation notice for contract action N00178-04-D-4030 FD03 (P00041). The Commander stated that subsequent posting of the presolicitation notice is no longer required, according to a March 19, 2010, DoD memorandum, "Revised Posting and Reporting Requirements for the American Recovery and Reinvestment Act of 2009 (Recovery Act)." The DoD memorandum revised the April 21, 2009, DoD guidance requiring presolicitation transparency for contract modifications. On July 16, 2010, a final FAR requirement exempted presolicitation notices for modifications to existing contracts and was incorporated into FAR 5.704. However, FAR 5.705 continues to require post-award disclosure and



publicizing of modifications to existing contracts. We agree with the Commander's comments and deleted draft Recommendation 4 regarding contract action N00178-04-D-4030 FD03 (P00041).

**1. We recommend that the Assistant Secretary of the Navy (Research, Development, and Acquisition) direct contracting offices to:**

**a. Post presolicitation and award notices to the required public Web sites for Recovery Act work.**

**b. Include appropriate descriptions of the Recovery Act work to be performed in public postings, full justification for solicitations or awards that are not fixed-price or subject to full and open competition in public postings, and all appropriate Recovery Act Federal Acquisition Regulation clauses for contract actions.**

***Navy Comments***

The Deputy Assistant Secretary of the Navy (Acquisition and Logistics Management), responding on behalf of the Assistant Secretary of the Navy (Research, Development, and Acquisition), agreed with the recommendations and stated that his office had issued four memoranda between March 25, 2009, and August 25, 2009, specifically directing Navy and Marine Corps contracting offices with contract actions funded in whole or in part by Recovery Act funds to comply with mandatory DoD instructions and implement guidance published by the OMB. The Deputy Assistant Secretary noted that the guidance included requirements for posting presolicitations and award notices. The four memoranda issued guidance on reporting contract actions; and reporting performance assessments for actions funded by the Recovery Act.

***Our Response***

The Deputy Assistant Secretary of the Navy comments are partially responsive to the intent of the recommendation. The guidance documents cited in the comments were already available to Navy contracting and program management personnel at the time of the initial execution of the contracting actions covered by this report and the required actions still were not taken. However, we see no benefit to pursuing further management comments as no future Navy NTEET program Recovery Act contracting actions appear likely.

**2. We recommend that the Commander, Naval Air Warfare Center, Aircraft Division, direct the posting of contract action N68335-10-C-0239 to include all required Recovery Act clauses.**

***Navy Comments***

Responding for the Commander, Naval Air Warfare Center, Aircraft Division, the Deputy Assistant Commander for Contracts partially concurred with the

recommendation. The Deputy Assistant Commander stated that contract N68335-10-C-0239 did include the required FAR clause 52.204-11, "American Recovery and Reinvestment Act-Reporting Requirements." The Deputy Assistant Commander concurred that FAR clauses, 52.203-15, "Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009," and 52.215-2, Alternative I, "Audit and Records - Negotiation," were required and would be incorporated into the contract by modification no later than March 31, 2011.

### ***Our Response***

Comments from the Deputy Assistant Commander for Contracts are responsive, and the actions meet the intent of the recommendation. We verified that on April 4, 2011, modification to contract N68335-10-C-0239 incorporated the two required FAR clauses. No further management comments are required.

### **3. We recommend that the Commander, Naval Surface Warfare Center, Carderock Division-Ship Systems Engineering Station:**

**a. Direct the posting of award notice for contract action N65540-08-D-0009-0007-02, and**

**b. Direct the modification of contract action N00178-04-D04089 EHP1 43 to include all required Recovery Act clauses.**

### ***Navy Comments***

The Commander, NAVSEA, did not concur with Recommendation 3. The Commander stated that the award notice for contract action N65540-08-D-0009-0007-02 was initially posted on February 3, 2010, to Navy Electronic Commerce Online, as required per Navy guidance. The Commander agreed that FBO did not appear to show the award notice, and the Commander considered the missing FBO entry to be a Navy Electronic Commerce Online systems error and not a NSWCCD/HQ procedural error. The Commander also stated that subsequent contract modifications successfully transferred the posting from the Navy Electronic Commerce Online to FBO. The Commander further noted that all subsequent posting and quarterly reporting actions were complete for N65540-08-D-0009-0007-02, as the contractor had submitted a final quarterly report in the fourth quarter of 2010.

The Commander stated that two of the clauses were included by reference in the subject modification and one clause was incorporated by full text. The Commander further noted that an administrative modification was issued to clearly state the titles of the three clauses and to incorporate FAR clause 52.204-11 by reference, instead of full text, on February 18, 2011.

## ***Our Response***

On April 25, 2011, as a result of our subsequent discussions with Office of the ASN (RD&A) personnel, the Navy posted contract action N65540-08-D-0009-0007-02 to FBO. While the Commander's comments were not responsive to Recommendation 3.a, the subsequent Navy action was responsive to the recommendation and to OMB Memorandum M-09-10 requirements that contract award notices be posted on the FBO Web site in accordance with FAR part 5.

The Commander's comments were responsive to Recommendation 3.b. We verified that modification N00178-04-D04089 EHP1-64, February 18, 2011, incorporated the three required FAR clauses. No further management comments are required.

### **4. We recommend that the Commander, Marine Corps Systems Command:**

#### **a. Direct the posting of:**

(1) Award notices for contract actions M67854-08-A-5051 (order 0004), M67854-08-A-5023 (order 0009), and M67854-06-C-5062 (P00006).

(2) Presolicitation notices for contract actions M67854-08-A-5051 (order 0004), M67854-08-A-5023 (order 0009).

(3) Appropriate descriptions to contract actions M67854-08-A-5051 (order 0004), and M67854-08-A-5023 (order 0009) of the Recovery Act work to be performed in Federal Business Opportunities and other required Web sites.

b. Direct the modification of contract actions M67854-08-A-5051 (order 0009), M67854-08-A-5023 (order 0004), and M67854-07-D-5115 (order 0013) M67854-09-C-5113, and M67854-06-C-5062 (P00006) to include all required Recovery Act clauses.

## ***Marine Corps Comments***

The Commander, MARCORSYSCOM, agreed with the recommendations. The Commander stated that action on Recommendations 4.a(1) and 4.a(2) would be completed by April 9, 2011, and that action on Recommendation 4.a(3) had been completed on August 5, 2009. The Commander also provided technical comment regarding Recommendation 4.b to revise incorrect numbering for two of the contract actions. The Commander stated that action on Recommendation 4.b was completed in October 2009.

## ***Our Response***

Comments from the Commander are responsive, and the actions meet the intent of the recommendations. We revised Recommendation 4.b per the Commander's comments. We verified that MARCORSYSCOM actions related to Recommendation 4 were

completed, although in some cases actual revisions did not occur until April 2011. No further comments are required.

**5. We recommend that the Commander, Air Force Materiel Command, direct the modification of contract F34601-03-D-0006 to include all required Recovery Act clauses.**

### ***Air Force Comments***

Responding for the Commander, AFMC, the Deputy Director of Contracting agreed that the Air Force contracting officer did not comply with Recovery Act reporting requirements for contract action F34601-03-D-0006-0007-04 and omitted the pertinent Recovery Act clauses with the issuance of the order. The Deputy Director stated that the contracting officer was not aware that Recovery Act funding was being used at the time of the receipt of the Military Interdepartmental Purchase Request from the Navy. The Deputy Director stated that AFMC was unable to comply with either draft Recommendation 7.a or Recommendation 5 (draft Recommendation 7.b) that the AFMC Commander direct the posting of the presolicitation notice for the contract action because work on the order had been completed. The Deputy Director noted that in the future, AFMC will strive to ensure contracting officers are aware of Recovery Act special reporting requirements and special clauses before issuance of solicitations.

### ***Our Response***

The Deputy Director's comments are partially responsive to the recommendation. Based on the Deputy Director's comments and subsequent supporting data, we concluded that contract action F34601-03-D-0006-0007-04 was completed and, as such, a recommendation concerning the posting of the presolicitation notice for contract action was obsolete, so we deleted the recommendation from the final report. However, as the underlying contract F34601-03-D-0006 remains open and active, we still believe that the Air Force should modify the contract to include applicable Recovery Act clauses for any such work performed under the contract. We have modified the recommendation to note the need to modify the underlying contract and request the Air Force provide additional comments to this recommendation.

## Appendix A. Scope and Methodology

This is the fifth in a series of reports on DoD implementation of the Recovery Act NTEET program. We conducted this performance audit from September 2009 to January 2011, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our finding and our conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We visited or contacted the following DON NTEET Recovery Act project offices: Office of Naval Research; NSWCCD/SSES (one project); MARCORSYSCOM (three projects); NAWCWD-China Lake (one project); NAVSEA-Washington Navy Yard (two projects); NAVAIR-Patuxent River (three projects); and NAVFAC-Port Hueneme (one project). During these visits and contacts we researched each project, its status in the contract award process, and how it was managed to comply with the transparency and accountability objectives in the Recovery Act and with implementing guidance issued by OPM, FAR, and DoD.

We obtained documentation, including charts on individual DON NTEET projects, Program Recovery Plan Weekly Reports, BAA process flow charts, BAA announcements, and obligation and expenditure plans. We reviewed program-related solicitation and contract award notices posted on the FBO Web site through July 31, 2010. Specifically, we determined whether:

- the selected projects were adequately planned to ensure the appropriate use of Recovery Act funds (Planning);
- funds were awarded and distributed in a prompt, fair, and reasonable manner (Funding);
- contract actions contained required Recovery Act FAR clauses (Initial Execution); and
- use of funds that were transparent to the public on FBO Government Web site (Project Execution).

Navy, Marine Corps, Air Force, and DLA officials used BAAs, BOAs, RFPs, and requests for quotes (RFQs) to solicit and award 35 contract actions, for a total of \$55.5 million. Of the 35 contract actions, 8 used BAAs, 4 used BOAs, 21 used RFPs, and 2 used RFQs.

We used this supporting documentation to determine whether the contract solicitations and awards met OMB, FAR, and DoD Recovery Act implementation and transparency requirements. We applied the Recovery Act Contract Checklist developed by the Recovery Accountability and Transparency Board. In addition, we met with officials in the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics to learn how NTEET projects were selected for Recovery Act funding.

We did not use classical statistical sampling techniques that would permit generalizing results to the total population because there were too many potential variables with unknown parameters at the beginning of this analysis. Predictive analytic techniques provided a basis for logical coverage not only of Recovery Act dollars being expended but also of types of projects and types of locations across the Military Services, Defense Agencies, State National Guard units, and public works projects managed by USACE.

## **Use of Computer-Processed Data**

We used computer-processed data to perform this audit. Specifically, we used the notices on the FBO Web site, data reported from the FPDS and the Excluded Parties List System, the DoD Recovery Act Financial and Activity Report, and contract documentation from the Electronic Data Archive System posted from April 2009 to November 2010. We tested the accuracy of this data by comparing the project data reported on these systems for consistency and by meeting with program officials responsible for reporting on the applicable Recovery Act requirements. Our audit focused on the reporting of contract actions on specific DON projects. From these procedures, we concluded that the DoD data were sufficiently reliable for our purposes.

## **Prior Coverage**

The Government Accountability Office, the Department of Defense Inspector General, and the Military Departments have issued reports and memoranda discussing DoD projects funded by the Recovery Act. You can access unrestricted reports at <http://www.recovery.gov/accountability>.

## Appendix B. Recovery Act Criteria and Guidance

The following list includes the primary Recovery Act criteria documents (notes appear at the end of the list):

- U.S. House of Representatives Conference Committee Report 111-16, “Making Supplemental Appropriations for Job Preservation and Creation, Infrastructure Investment, Energy Efficiency and Science, Assistance to the Unemployed, and State and Local Fiscal Stabilization, for the Fiscal Year Ending September 30, 2009, and for Other Purposes,” February 12, 2009
- Public Law 111-5, “American Recovery and Reinvestment Act of 2009,” February 17, 2009
- OMB Memorandum M-09-10, “Initial Implementing Guidance for the American Recovery and Reinvestment Act of 2009,” February 18, 2009
- OMB Bulletin No. 09-02, “Budget Execution of the American Recovery and Investment Act of 2009 Appropriations,” February 25, 2009
- White House Memorandum, “Government Contracting,” March 4, 2009
- White House Memorandum, “Ensuring Responsible Spending of Recovery Act Funds,” March 20, 2009
- OMB Memorandum M-09-15, “Updated Implementing Guidance for the American Recovery and Reinvestment Act of 2009,” April 3, 2009<sup>1</sup>
- OMB Memorandum M-09-16, “Interim Guidance Regarding Communications With Registered Lobbyists About Recovery Act Funds,” April 7, 2009
- OMB Memorandum M-09-19, “Guidance on Data Submission under the Federal Funding Accountability and Transparency Act (FFATA),” June 1, 2009
- OMB Memorandum M-09-21, “Implementing Guidance for the Reports on Use of Funds Pursuant to the American Recovery and Reinvestment Act of 2009,” June 22, 2009<sup>2</sup>
- OMB Memorandum M-09-24, “Updated Guidance Regarding Communications with Registered Lobbyists About Recovery Act Funds,” July 24, 2009

- OMB Memorandum M-09-30, “Improving Recovery Act Recipient Reporting,” September 11, 2009
- OMB Office of Federal Procurement Policy, “Interim Guidance on Reviewing Contractor Reports on the Use of Recovery Act Funds in Accordance with FAR Clause 52.204-11,” September 30, 2009<sup>2</sup>
- OMB Memorandum M-10-08, “Updated Guidance on the American Recovery and Reinvestment Act – Data Quality, Non-Reporting Recipients, and Reporting of Job Estimates,” December 18, 2009<sup>2</sup>
- OMB Memorandum M-10-14, “Updated Guidance on the American Recovery and Reinvestment Act,” March 22, 2010<sup>2</sup>
- White House Memorandum, “Combating Noncompliance With Recovery Act Reporting Requirements,” April 6, 2010
- OMB Memorandum M-10-17, “Holding Recipients Accountable for Reporting Compliance under the American Recovery and Reinvestment Act,” May 4, 2010<sup>2</sup>
- OMB Memorandum M-10-34, “Updated Guidance on the American Recovery and Reinvestment Act,” September 24, 2010<sup>2</sup>

## Notes

<sup>1</sup> Document provides Government-wide guidance for carrying out programs and activities enacted in the American Recovery and Reinvestment Act of 2009. The guidance states that the President’s commitment is to ensure that public funds are expended responsibly and in a transparent manner to further job creation, economic recovery, and other purposes of the Recovery Act.

<sup>2</sup> Document provides Federal agencies guidance for carrying out the reporting requirements included in section 1512 of the Recovery Act. The reports will be submitted by recipients beginning in October 2009 and will contain detailed information on the projects and activities funded by the Recovery Act.



## Appendix C. DoD Near Term Energy-Efficient Technologies Program Funding and Functional Areas

The Recovery Act appropriated \$300 million in DoD RDT&E funds in four appropriation accounts of \$75 million each for Army, Navy, Air Force, and Defense-wide RDT&E Recovery Act projects. The DoD NTEET program divided the funds to support project categories. The table below provides the RDT&E funding and category of the planned work.

**Program Categories and Values of Energy-Related RDT&E Projects**  
(values in thousands)

Category	Army	Navy	Air Force	Defense-Wide	DoD Total
Fuel Optimization for Mobility Platforms	\$40,000	\$52,900	\$28,000	\$16,000	\$136,900
Facility Energy Initiatives	10,000	3,500			13,500
Operational Efficiencies and Commercial Practices	None	None	1,000	9,000	10,000
Domestic Supply and Distribution	15,000	16,100	37,000	47,000	115,100
Tactical Power Systems and Generators	10,000	2,500	9,000	3,000	24,500
<b>Total</b>	<b>\$75,000</b>	<b>\$75,000</b>	<b>\$75,000</b>	<b>\$75,000</b>	<b>\$300,000</b>

The energy-related projects have the potential to identify technologies that can increase our fuel efficiency and thereby reduce our dependence on foreign energy.

### Fuel Optimization for Mobility Platforms

These RDT&E efforts include testing various materials, like ceramics, in engine and equipment design to lower thermal loads and decrease the need for cooling of component parts that require additional energy to perform the cooling tasks. Efforts also include conducting demonstrations on the fuel efficiency of low observable subsonic propulsion systems for unmanned aerial vehicles.

### Facility Energy Initiatives

These projects include developing or reviewing off-the-shelf enterprise energy auditing programs and software that can couple energy security with energy efficiency, reduce power consumption in tactical heating and air-conditioning systems, and develop whole-building energy modeling and monitoring systems and renewable energy building integration.

## **Operational Efficiencies**

These projects include developing or reviewing off-the-shelf enterprise energy auditing and water management programs and software that can couple energy security with energy efficiency, whole-building energy modeling, monitoring systems, and renewable energy building integration.

## **Domestic Energy Supply and Distribution**

These projects include waste-to-energy and waste-to-fuel technology research and demonstrations; landfill gas use; biomass and algae fuel oil production; multijunction solar photovoltaics for cells and sensors; wave and thermal energy development from oceans; wind power utilization; and radar cross sections analysis.

## **Tactical Power Systems and Generators**

These projects include developing and demonstrating methanol-based portable fuel cells with improved energy densities, long-duration multijunction photovoltaics for unmanned aerial vehicles, waste heat to cooled down by means of absorption environmental control systems, and scalable microgrid electrical distribution systems for fixed and tactical installation use.

## **Appendix D. Description and Status of DON Near Term Energy-Efficient Technologies Projects**

The Recovery Act provided \$75 million of RDT&E funding for improvements in energy generation and efficiency, transmission, and storage and use on military installations and within operations forces. The projects include research and development of propulsion/electric drive/engine efficiency, aircraft fuel efficiency, ship fuel efficiency, operational changes, renewable development and testing, alternative fuels, alternative fuel sources, and small-scale cogeneration.

### **1. On-Board Vehicle Power**

The purpose of the On-Board Vehicle Power project is to compete, procure, and test innovative on-board (or under-hood) vehicle power systems that use vehicles' internal combustion engine. The benefits of the On-Board Vehicle Power project are to improve tactical wheeled vehicle fuel economy while providing exportable electric power, increase electric power by 5–10-fold, and increase fuel savings up to 40 percent. MARCORSYSCOM awarded two contract actions under this project for a total of \$733,569. MARCORSYSCOM contracting efforts complied with Recovery Act requirements, the OMB guidance, the FAR, and DoD implementing guidance.

### **2. F-18 Engine Efficiency Improvements**

The primary objective of this project is to develop and test technology to improve fuel efficiency of the F-414 engine used in the F-18 E/F/G models. NAVAIR issued two contract actions to the General Electric Company, valued at \$15 million. NAVAIR contracting efforts complied with Recovery Act requirements, the OMB guidance, the FAR, and DoD implementing guidance.

### **3. Aircraft Energy Conservation RDTE Program**

The purpose of this project is to institute aircraft energy conservation and upgrade air flight performance navigation. DON is seeking innovative concepts that can introduce applications for aircraft energy conservation and carbon footprint reduction with the potential for rapid transition to Fleet. NAVAIR used an existing Air Force contract with Rolls Royce to obtain the services through a July 7, 2009, modification valued at \$228,104. We concluded that public knowledge would have been improved by use of required presolicitation notice posted on the FBO Web site and ensuring that all of the required Recovery Act clauses were listed in the contract action.

### **4. Hybrid Electric Drive System Development for Surface Combatants**

The objective of this project is to develop and test (on land and at sea) electrical rotating machine, converter power electronics, supervisory control system, and ship integration

for hybrid electric drive system. Another objective of this project is to reduce DDG-51 fuel consumption and increase mission effectiveness through longer time on station. It also supports cruising speeds (less than 12 knots) without the use of main propulsion. NAVSEA and NSWCCD/SSES awarded 14 contract actions, valued at \$17.6 million, for this project. NSWCCD/SSES would have improved public knowledge by posting an award notice and by ensuring that all of the required Recovery Act clauses were listed in the contract action.

## **5. Advanced High Energy HVAC System**

The Advanced High Energy (Heating, Ventilating, and Air-Conditioning) HVAC System project's objective is to develop and test an advanced high-efficiency shipboard HVAC system to reduce fuel used to provide shipboard cooling. Navy chilled water plants (often called air-conditioning plants or chillers) provide mission-critical cooling to weapons and command and control systems and for crew comfort. As these systems advance to include high-energy radars and directed energy weapons, the cooling demand—along with acquisition, fuel, and life cycle cost—will increase dramatically. The Navy's current cooling technology (vapor compression) is 40 years old and is based on electronically enhanced, mechanically complex fixed-speed centrifugal compressors. Navy HVAC systems must be very robust, to have 35–50-year service lives, and are designed for extreme environments. NAVSEA awarded one contract action to York International Corporation, valued at \$2.2 million, for this project. NAVSEA contracting efforts complied with Recovery Act requirements, the OMB guidance, the FAR, and DoD implementing guidance.

## **6. Navy Shipboard Energy Program**

The objective of this project is to demonstrate fuel savings of incorporating hull appendage to eliminate directional stability and steering issues on LHA-1/6 and LHD-1 ship classes. NSWCCD/HQ and NSWCCD/SESS each awarded one contract action, valued at \$30 thousand and \$250 thousand, respectively, for this project. NSWCCD/HQ would have improved public knowledge by posting a presolicitation notice on the FBO Web site. NSWCCD/SSES contracting efforts complied with Recovery Act requirements, the OMB guidance, the FAR, and DoD implementing guidance.

## **7. Improved Environmental Control Equipment**

The objective of this project is to reduce power consumption in tactical HVAC and reduce convoy needs. Another objective is to backfit/test energy efficiency modifications to environmental control units that incorporate variable-speed fan drives, multifrequency drive components, and nonchlorofluorocarbon refrigerants. Currently up to 80 percent of electric power generation on forward bases and outposts is consumed by environmental control units to provide heating, ventilation, and air-conditioning. Benefits of improved environmental control equipment include improved energy efficiency, reduced electrical power requirements, achieving 775,000 gallons of oil fuel savings per year, and satisfying Environmental Protection Agency hydrochlorofluorocarbon restrictions. MARCORSYSCOM issued five contract actions, valued at \$3.1 million, for this project. We concluded that public knowledge would have been improved by use of required

presolicitation and award notices posted on the FBO Web site, an adequate project description on FBO, posting all contract actions on FPDS, and ensuring that all of the required Recovery Act clauses were listed in the contract actions.

## **8. Ocean and Wave Energy Utilization-OTEC**

The objective of the Ocean and Wave Energy Utilization-(Ocean Thermal Energy Conversion) OTEC project is to demonstrate feasibility of wave and thermal energy from oceans to provide renewable energy for shore installations; demonstrate feasibility of the full-scale project for Naval Support Facility Diego Garcia; and advance technology. NAVFAC-Port Hueneme awarded one contract action to Lockheed Martin for \$8.1 million on June 24, 2009. NAVFAC-Port Hueneme's contracting efforts complied with Recovery Act requirements, the OMB guidance, the FAR, and DoD implementing guidance.

## **9. Alternative Test Fuel and Cert Protocol Acceleration**

The Alternative Test Fuel and Cert (Certification) Protocol Acceleration project aims to accelerate testing of alternative fuels for use in Naval tactical vehicles: ships, aircraft, and Marine Corps combat vehicles. DON is developing test and certification protocols to obtain the necessary data required to approve the addition of alternative fuels into JP-5 and F-76 fuels. Protocol testing is currently labor and fuel intensive. DON is seeking alternative test or analysis technologies that could be substituted into current protocols to obtain required data while reducing cost and fuel requirements. NAVAIR awarded two contract actions, DLA awarded one contract action, NAWCAD-Lakehurst awarded one contract action, and NAVFAC-Port Hueneme awarded one contract action, valued at \$4.7 million, for this project. NAWCAD-Lakehurst would have improved transparency by ensuring all of the required Recovery Act clauses were included in the contract. NAVAIR, DLA, and NAVFAC-Port Hueneme's contracting efforts complied with Recovery Act requirements, the OMB guidance, the FAR, and DoD implementing guidance.

## **10. Plasma Fusion (Polywell)**

The Plasma Fusion (Polywell) project is a combined Navy/Defense-wide effort to demonstrate a fusion plasma confinement system for shore and shipboard applications. This procurement is a follow-on to initial research into small-scale nuclear fusion systems using a unique approach of energy matter conversion. It covers research, analysis, development, and testing to validate the basic physics of the advanced gaseous electrostatic energy concept. The objective of this procurement is to provide the Navy with data for potential applications of advanced gaseous electrostatic energy. It builds on previous concept-demonstration benchtop versions of plasma wiffle balls. NAWCWD-China Lake awarded one contract action, valued at \$1.3 million, for this project. NAWCWD-China Lake contracting efforts complied with Recovery Act requirements, the OMB guidance, the FAR, and DoD implementing guidance.

## **11. Integrated Generator/Environmental Control**

The Integrated Generator/Environmental Control project's objective is to develop and test a more energy-efficient integrated trailer environmental control unit generator, an integrated high-mobility, multipurpose wheeled-vehicle towable unit that highly supports command and control systems and other forward-deployed operation centers and activities. Innovations will include removal of the mechanical-electrical-mechanical conversion process, a permanent magnet generator, and engine coolant for conditioned air heating. The benefits of the integrated generator/environmental control project are fuel savings of 20 percent, greater heating and cooling capacity, and provision of full 30 kilowatts of electrical power output in all environments (compared with 7 kilowatts in old units). MARCORSYSCOM awarded one contract action, valued at \$2.2 million, for this project. MARCORSYSCOM would have improved public knowledge by posting an award notice and by ensuring that all of the required Recovery Act clauses were listed in the contract action.

## **Appendix E. Management Comments on the Report and Our Response**

The Navy and Marine Corps provided comments on the internal controls section, one finding discussion area, and the discussion of individual Navy NTEET projects in Appendix D. For the full text of the Navy, Marine Corps, and Air Force comments, see the Management Comments section of the report.

### ***Marine Corps Comments on Review of Internal Controls***

The Commander, MARCORSYSCOM, agreed with the internal controls discussion and noted that internal control weaknesses discussed in the report would be officially addressed in the 2011 MARCORSYSCOM Overall Managers Internal Control program.

### ***Navy Comments on Finding: NTEET Projects Without Recovery Act Award Notices***

Responding for the Commander, NAVAIR, the Deputy Assistant Commander for Contracts disagreed with draft report statements that the Navy could have improved initial execution of the projects by entering contract action N00019-09-G-0009-0005-01 into the FPDS. As part of the response, the Navy provided us additional documentation to verify that the contract action had been entered into FPDS.

### ***Our Response***

After further review of the contract action at issue, we agree with the Deputy Assistant Commander's comment that the FPDS entry for the contract action was posted on public Web sites as required by FAR part 4, "Administrative Matters." As a result, we revised the report discussion and summary report data to note the posting.

### ***Marine Corps Comments on Appendix D: Description and Status of DON NTEET Projects***

The Commander, MARCORSYSCOM, stated that MARCORSYSCOM awarded two contract actions, valued at \$3.9 million, for the aircraft energy conservation project. The Commander also stated that MARCORSYSCOM issued six contract actions for the improved environmental control equipment project, valued at \$3.4 million. In addition, the Commander stated that MARCORSYSCOM issued two contract actions, valued at \$2.2 million, for the integrated generator/environmental control project.

### ***Our Response***

Our report reviewed Navy-, Marine Corps-, Air Force-, and DLA-awarded contract actions made as of July 31, 2010, for the 11 Navy NTEET projects. We reviewed two contract actions valued at \$733,569 for the on-board vehicle project and one contract action valued at \$2.2 million for the integrated generator/environmental control project. The Commander's comments implied that approximately \$3.2 million additional contract funds were used for the on-board vehicle project and one additional contract action valued at approximately \$0.2 million was used for the integrated generator/environmental control project. However, the additional MARCORSYSCOM contract actions and

funding for the two projects occurred after July 31, 2010, and were not within the time period limits of this audit's scope of review. Therefore, we have not included the additional aircraft energy conservation project and integrated generator/environmental control projects funding in our final report analysis.

We initially reviewed four contract actions valued at \$2.7 million for the improved environmental control equipment project. The Commander's comments implied an additional two contract actions valued at approximately \$0.7 million for the same project. Additional MARCORSYSCOM documentation provided to us showed that one of the additional contract actions, M67854-10-D-5037-0001, valued at \$394,000, occurred before July 31, 2010. We have modified the final report to include analysis of M67854-10-D-5037-0001 and have revised our report baseline accordingly to 35 contract actions valued at \$55.5 million for the 11 Navy NTEET projects.



## Appendix F. DON Near Term Energy-Efficient Technologies Contracts

Project/Contract Number	Contract Action	Contract Type	Source Procedure	Use of Previously Awarded Contracts	Posted Pre-solicitation in FBO	Posted Award in FBO	Posted Adequate Project Description in FBO	Included Appropriate Recovery Act Clauses in the Contract	Included Contract Action in FPDS	Contract Action Amount
<b>On-Board Vehicle Power</b>										
M67854-10-D-5108	Contract	FFP	Full and open competition	No	Yes	Yes	Yes	Yes	Yes	\$483,569
M67854-10-D-5109	Contract	FFP	Full and open competition	No	Yes	Yes	Yes	Yes	Yes	\$250,000
<b>F-18 Engine Efficiency Improvements</b>										
N00019-09-G-0009 (order 0005)	Order	CPFF	Sole Source	Yes	Yes	Yes	Yes	Yes	Yes	\$7,500,000
N00019-09-G-0009-0005-01	Modification	CPFF	Sole Source	Yes	Yes	Yes	Yes	Yes	Yes	\$7,500,000
<b>Aircraft Energy Conservation RDTE Program</b>										
F34601-03-D-0006-0007-04	Modification	CPFF	Sole source	Yes	No	Yes	Yes	No	Yes	\$228,104
<b>Hybrid Electric Drive System Development for Surface Combatants</b>										
N00024-09-C-4222	Contract	CPFF	Full and open competition after exclusion of sources	No	Yes	Yes	Yes	Yes	Yes	\$13,000,000
N00024-08-C-4201 (P00011)	Modification	CPFF	Full and open competition	Yes	Yes	Yes	Yes	Yes	Yes	\$100,000
N65540-08-D-0009-0007-02	Modification	CPFF	Full and open competition after exclusion of sources	Yes	Yes	No	Yes	Yes	Yes	\$100,000

FFP    firm-fixed-price  
CPFF    cost-plus-fixed-fee

Project/Contract Number	Contract Action	Contract Type	Source Procedure	Use of Previously Awarded Contracts	Posted Pre-solicitation in FBO	Posted Award in FBO	Posted Adequate Project Description in FBO	Included Appropriate Recovery Act Clauses in the Contract	Included Contract Action in FPDS	Contract Action Amount
N65540-08-D-0009-0007-05	Modification	CPFF	Full and open competition after exclusion of sources	Yes	Yes	Yes	Yes	Yes	Yes	\$80,000
N0024-07-C-4008 (P00012)	Modification	CPFF	Full and open competition after exclusion of sources	Yes	Yes	Yes	Yes	Yes	Yes	\$299,994
N00024-07-C-4213 (P00006)	Modification	CPFF	Full and open competition	Yes	Yes	Yes	Yes	Yes	Yes	\$800,000
N00024-07-C-4217 (P00030)	Modification	CPFF	Full and open competition	Yes	Yes	Yes	Yes	Yes	Yes	\$800,000
N00024-07-C-4222 (P00002)	Modification	CPFF	Full and open competition	Yes	Yes	Yes	Yes	Yes	Yes	\$500,000
N00024-08-C-4212 (P00002)	Modification	CPFF	Full and open competition	Yes	Yes	Yes	Yes	Yes	Yes	\$800,000
N00024-08-C-4203 (P00003)	Modification	CPFF	Sole source	Yes	Yes	Yes	Yes	Yes	Yes	\$300,000
N00178-04-D-4089 EHP1 43	Modification	CPFF	Full and open competition	Yes	Yes	Yes	Yes	No	Yes	\$350,000
N00178-04-D-4089 EHP1 48	Modification	CPFF	Full and open competition	Yes	Yes	Yes	Yes	Yes	Yes	\$200,000
N00178-04-D-4077 FD02 14	Modification	CPFF	Full and open competition	Yes	Yes	Yes	Yes	Yes	Yes	\$46,000
N00178-04-D-4077 FD02 21	Modification	CPFF	Full and open competition	Yes	Yes	Yes	Yes	Yes	Yes	\$254,000

FFP    firm-fixed-price  
CPFF   cost-plus-fixed-fee

Project/Contract Number	Contract Action	Contract Type	Source Procedure	Use of Previously Awarded Contracts	Posted Pre-solicitation in FBO	Posted Award in FBO	Posted Adequate Project Description in FBO	Included Appropriate Recovery Act Clauses in the Contract	Included Contract Action in FPDS	Contract Action Amount
<b>Advanced High Energy HVAC System</b>										
N65540-06-D-0021 (order 0008)	Order	CPFF	Full and open competition after exclusion of sources	Yes	Yes	Yes	Yes	Yes	Yes	\$2,234,000
<b>Navy Shipboard Energy Program</b>										
N00178-04-D-4110 FD02 11	Modification	CPFF	Full and open competition	Yes	Yes	Yes	Yes	Yes	Yes	\$250,000
N00178-04-D-4030 FD03 (P00041)	Modification	CPFF	Full and open competition	Yes	No	Yes	Yes	Yes	Yes	\$30,000
<b>Improved Environmental Control Equipment</b>										
M67854-08-A-5051 (order 0004)	Order	FFP	Full and open competition	Yes	No	No	No	No	Yes	\$247,637

FFP    firm-fixed-price  
CPFF   cost-plus-fixed-fee

Project/Contract Number	Contract Action	Contract Type	Source Procedure	Use of Previously Awarded Contracts	Posted Pre-solicitation in FBO	Posted Award in FBO	Posted Adequate Project Description in FBO	Included Appropriate Recovery Act Clauses in the Contract	Included Contract Action in FPDS	Contract Action Amount
M67854-08-A-5023 (order 0009)	Order	FFP	Sole source	Yes	No	No	No	No	Yes	\$352,046
M67854-09-C-5113*	Contract	FFP	Sole source	No	Yes	Yes	Yes	No	Yes	\$1,450,420
M67854-07-D-5115 (order 0013)	Order	FFP	Full and open competition after exclusion of sources	Yes	Yes	Yes	Yes	No	Yes	\$698,950
M67854-10-D-5037 (order 0001)	Order	FFP	Sole source	Yes	Yes	Yes	Yes	Yes	Yes	\$394,000
<b>Ocean and Wave Energy Utilization-OTEC</b>										
N62583-09-C-0083	Contract	FFP	Full and open competition	No	Yes	Yes	Yes	Yes	Yes	\$8,119,625
<b>Alternative Test Fuel and Cert Protocol Acceleration</b>										
N00019-09-G-0009 (order 0006)	Order	CPFF	Sole source	Yes	Yes	Yes	Yes	Yes	Yes	\$1,946,351
N00019-05-G-0026 (order 0202)	Order	FFP	Sole source	Yes	Yes	Yes	Yes	Yes	Yes	\$455,290
SP0600-09-D-0519	Contract	FFP	Full and open competition	No	Yes	Yes	Yes	Yes	Yes	\$1,900,000
N68335-10-C-0239	Contract	CPFF	Sole source	No	Yes	Yes	Yes	No	Yes	\$254,594
N62473-07-D-4006 (P00017)	Order	FFP	Full and open competition	Yes	Yes	Yes	Yes	Yes	Yes	\$98,348

\*Contract action M67854-09-C-5113 was modified to contract action M67854-10-C-5113 on January 11, 2010.

FFP firm-fixed-price  
CPFF cost-plus-fixed-fee

Project/Contract Number	Contract Action	Contract Type	Source Procedure	Use of Previously Awarded Contracts	Posted Pre-solicitation in FBO	Posted Award in FBO	Posted Adequate Project Description in FBO	Included Appropriate Recovery Act Clauses in the Contract	Included Contract Action in FPDS	Contract Action Amount
<b>Plasma Fusion (Polywell)</b>										
N68936-09-C-0125	Contract	CPFF	Sole source	No	Yes	Yes	Yes	Yes	Yes	\$1,272,826
<b>Integrated Generator/ Environmental Control</b>										
M67854-06-C-5062 (P00006)	Modification	CPFF	Full and open competition after exclusion of sources	Yes	Yes	No	Yes	No	Yes	\$2,185,433
<b>Yes/No Totals</b>				<b>27/8</b>	<b>31/4</b>	<b>31/4</b>	<b>33/2</b>	<b>27/8</b>	<b>35</b>	
<b>Total</b>										<b>\$55,481,187</b>

FFP    firm-fixed-price  
CPFF    cost-plus-fixed-fee

# Department of the Navy Comments

Final Report  
Reference



DEPARTMENT OF THE NAVY  
OFFICE OF THE ASSISTANT SECRETARY  
(RESEARCH, DEVELOPMENT AND ACQUISITION)  
1000 NAVY PENTAGON  
WASHINGTON DC 20350-1000

April 1, 2011

## MEMORANDUM FOR PROGRAM DIRECTOR, ACQUISITION AND CONTRACT MANAGEMENT

SUBJECT: American Recovery and Reinvestment Act – Department of the Navy Near  
Term Energy-Efficient Technologies Projects (Draft Audit Report Project  
No. D2009-D000AB-0170.002)

The attached Department of the Navy comments are provided in response to your  
memorandum dated February 15, 2011.

The Deputy Assistant Secretary of the Navy for Acquisition and Logistics  
Management comments in response to recommendations 1.a and 1.b for the Assistant  
Secretary of the Navy (Research, Development and Acquisition) is attached. The  
responses to recommendations 2.a and 2.b for the Commander, Naval Air Systems  
Command and recommendation 3 for the Commander, Naval Air Warfare Center,  
Aircraft Division, are provided in the attached NAVAIR memorandum dated  
March 9, 2011. The responses to recommendation 4 for the Commander, Naval Surface  
Warfare Center, Carderock Division-Maryland and recommendations 5.a and 5.b for the  
Commander, Naval Surface Warfare Center, Carderock Division-Ship System  
Engineering Station, are provided in the attached Naval Sea Systems Command  
memorandum dated March 21, 2011. Finally, recommended technical edits and  
responses to recommendations 6.a and 6.b for the Commander, Marine Corps Systems  
Command (MARCORSYSCOM) are provided in the attached MARCORSYSCOM  
memorandum dated March 24, 2011. We believe that all of the responses meet the intent  
of the applicable recommendations.

My point of contact for this matter is [REDACTED]. He can be reached at  
[REDACTED]

*Elliott B. Branch*  
Elliott B. Branch  
Executive Director  
DASN(A&LM)

Attachment:  
As stated

Deleted  
Renumbered as  
Recommendation 2  
Deleted  
Renumbered as  
Recommendation  
3.a and 3.b  
Renumbered as  
Recommendation  
4.a and 4.b

**DEPUTY ASSISTANT SECRETARY OF THE NAVY  
(ACQUISITION & LOGISTICS MANAGEMENT) RESPONSE**

**TO**

**DODIG DRAFT AUDIT REPORT ON AMERICAN RECOVERY AND  
REINVESTMENT ACT- DEPARTMENT OF THE NAVY NEAR TERM  
ENERGY-EFFICIENT TECHNOLOGIES PROJECTS**

**(PROJECT NO. D2009-D000AB-0170.002)**

**RECOMMENDATION 1. a. :** We recommend that the Assistant Secretary of the Navy (Research, Development, and Acquisition) direct contracting offices to:

a. Post presolicitation and award notices to the required public Web sites for Recovery Act work.

**DASN (A&LM) RESPONSE:** Concur. During the period that the audit was being conducted, DASN(A&LM) completed action required by this recommendation by issuing a total of four memorandums which specifically directed Navy and Marine Corps contracting offices, that had contract actions funded in whole or in part by Recovery Act funds, to comply with mandatory DoD instructions and implementation guidance published by the Office of Management and Budget. DASN (A&LM) memorandums were issued on March 25, 2009, May 22, 2009, July 14, 2009, and August 25, 2009. These four memorandums addressed the requirements for posting presolicitation and award notices, exercising proper oversight in tracking Recovery Act funds, requirements for publicizing the award notices for actions awarded using non-competitive procedures and those resulting in other than a fixed-price type contract, inclusion of required Recovery Act FAR clauses, and the use of clear and concise language to describe planned procurements.

**RECOMMENDATION 1.b:** We recommend that the Assistant Secretary of the Navy (Research, Development, and Acquisition) direct contracting offices to:

b. Include appropriate descriptions of the Recovery Act work to be performed in public postings, full justification for solicitation or awards that are not fixed-price or subject to full and open competition in public postings, and all appropriate Recovery Act Federal Acquisition Regulation clauses for contract actions.

**DASN (A&LM) RESPONSE:** Concur. See the response under Recommendation 1.a. above.



DEPARTMENT OF THE NAVY  
NAVAL AIR SYSTEMS COMMAND  
RADM WILLIAM A. MOFFETT BUILDING  
47123 BUSE ROAD, BLDG 2272  
PATUXENT RIVER, MARYLAND 20670-1547

IN REPLY REFER TO

4200  
Ser AIR-2.1.1.3/019-11

MAR 9 2011

MEMORANDUM

From: AIR-2.0  
To: AIR-00G

Subj: NAVAIR RESPONSE TO DODIG DRAFT REPORT ENTITLED "AMERICAN  
RECOVERY AND REINVESTMENT ACT - DEPARTMENT OF THE NAVY NEAR  
TERM ENERGY-EFFICIENT TECHNOLOGIES PROJECTS" (D2009-D000AB-0170.002)

Ref: (a) AIR-00G Email of 18 Feb 11 Forwarding Draft Report for Review and Comment

Encl: (1) AIR-2.0 Response to DODIG Draft Audit Report Entitled "American Recovery and  
Reinvestment Act - Department of the Navy Near Term Energy-Efficient Technologies  
Projects."

1. As requested by reference (a), AIR 2.0 has reviewed the subject draft audit report. Enclosure (1)  
contains the comments which resulted from this review. In addition, the report does not contain  
information deemed to be exempt from release under FOIA.

J. T. PALMER  
CAPT, SC, USN  
Deputy Assistant Commander  
for Contracts



**DEPARTMENT OF THE NAVY RESPONSE TO  
DODIG DRAFT REPORT ON  
AMERICAN RECOVERY AND REINVESTMENT ACT-  
DON NAVY NEAR TERM ENERGY-EFFICIENT TECHNOLOGIES PROJECTS  
PROJECT NUMBER D2009-D000AB-0170.002**

**Finding:** DON properly justified and adequately planned and funded 11 Recovery Act NTEET projects. However, the Navy, Marine Corps, and the Air Force could have improved initial execution of projects by:

- Properly posting pre-solicitation or award notices for 8 contract actions on the FBO Web site,
- Including required FAR Recovery Act contract clauses in 8 contract actions,
- Describing the work to be performed for 2 contract actions on the FBO Web site, and
- Entering 1 contract action in the FPDS.

The Navy, Marine Corps, and Air Force did not post pre-solicitations or award notices, and did not include required FAR Recovery Act clauses in the contract actions, or describe the work to be performed in the pre-solicitations or award notices posted on the FBO web site because contracting officials modified previously negotiated non-Recovery Act contract actions and were unaware that Recovery Act funds required the clauses. Inclusion of all applicable Recovery Act clauses in contract actions informs contractors about reporting requirements and promotes compliance. As a result, DON did not achieve transparency in all its Recovery Act actions, which was a primary objective of the Recovery Act.

**NAVAIR Comments:** *Do not concur with fourth bullet of finding "Entering 1 contract action in the FPDS". Please see response to recommendation 2b below and attached copy of the Contract Action Report (CAR) for N00019-09-G-0009-0005-01 from FPDS-NG.*

**Recommendation 2:** Commander, Naval Air Systems Command, direct the posting of:

- a. Information for contract action N00019-09-G-0009 (DO 0006) to include full justification for awards that are not fixed-price in Federal Business Opportunities and other required Web sites.
- b. Contract action N00019-09-G-0005-01 to the Federal Procurement Data System.

**NAVAIR Comments:** *Do not concur.*

- a. *Please see the attached previously posted copies of the pre-award and award notice. Both of the notices were posted to Federal Business Opportunities as required by FAR Part 5; the pre-award synopsis was posted 09 April 2009 and post-award synopsis was posted 29 May 2009. The pre-award synopsis includes a statement addressing the reason for awarding the order as cost plus fixed fee.*
- b. *Please see the attached copy of the Contract Action Report (CAR) for N00019-09-G-0009-0005-01, from the Federal Procurement Data System. This contract action*

Revised

Deleted

Deleted

Deleted

Not included  
due to length

Not included  
due to length

*report was prepared 12 May 2009, the same day that the modification was signed by the Contracting Officer.*

**Recommendation 3:** Commander, Naval Air Warfare Center, Aircraft Division direct the posting of contract action N68335-10-C-0239 to include all required Recovery Act clauses.

**NAVAIR Comments:** Partially Concur. Contract N68335-10-C-0239 does include the required FAR clause 52.204-11 American Recovery and Reinvestment Act – Reporting Requirements. Concur that two other clauses are required and will be incorporated into the contract by modification. The two FAR clauses to be incorporated into the contract are 52.203-15 Whistleblower Protections Under the American Recovery and Reinvestment Act of 2009 and 52.215-2 Alt I Audit and Records – Negotiation. It is anticipated that the modification to incorporate 52.203-15 and 52.215-2 Alt I will be executed no later than 31 March 2011.

Renumbered as  
Recommendation 2



**DEPARTMENT OF THE NAVY**  
NAVAL SEA SYSTEMS COMMAND  
1333 ISAAC HULL AVE SE  
WASHINGTON NAVY YARD DC 20376-0001

IN REPLY TO

7500  
Ser 00N3B/032  
21 Mar 11

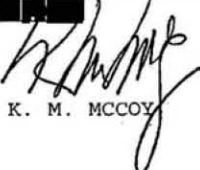
From: Commander, Naval Sea Systems Command  
To: Assistant Secretary of the Navy, (Research, Development & Acquisition) Acquisition & Logistics Management

Subj: DODIG DRAFT AUDIT REPORT - AMERICAN RECOVERY AND REINVESTMENT ACT - DEPARTMENT OF THE NAVY NEAR TERM ENERGY EFFICIENT TECHNOLOGIES PROJECTS (D2009-0170.002)

Encl: (1) NAVSEA Response to the Subject DODIG Draft Report

1. Enclosure (1) is NAVSEA's response to the subject draft audit report prepared in the required DON format.

2. For additional information, contact [REDACTED]  
[REDACTED] or [REDACTED]

  
K. M. MCCOY

Copy to:  
OASN (FMO-1)  
NSWC HQ

DEPARTMENT OF THE NAVY RESPONSE  
TO  
DODIG DRAFT REPORT ON AMERICAN RECOVERY AND REINVESTMENT  
ACT-DEPARTMENT OF THE NAVY NEAR TERM ENERGY EFFICIENT  
TECHNOLOGIES PROJECTS  
(Project No. D2009-D000AB-0170.002)

DODIG Audit Recommendation 4:

We recommend that the Commander, Naval Surface Warfare Center, Carderock Division-Maryland, direct the posting of the presolicitation notice for contract action N00178-04-D-4030 FD03 (P00041).

Deleted

DON Response:

Do not concur. Although, a presolicitation notice was not issued for modification P00041, dated 17 Jun 2009, due to initial misunderstanding of posting requirements, the posting of a pre-solicitation notice is no longer required per DOD memo dated 19 March 2010 "Revised Posting and Reporting Requirements for the American Recovery and Reinvestment Act of 2009 (Recovery Act)."

All subsequent posting and reporting required actions were completed for modification P00041. The contractor submitted a "Final" report in CY10 Q3 after a number of quarterly reporting cycles. Therefore, there would be no additional benefit to the public in posting a pre-solicitation notice for modification P00041. Moreover, posting a pre-solicitation notice after the contract has been awarded, when there is no prospective requirement and no prospective opportunity to submit a proposal, would only cause confusion.

DEPARTMENT OF THE NAVY RESPONSE  
TO  
DODIG DRAFT REPORT ON AMERICAN RECOVERY AND REINVESTMENT  
ACT-DEPARTMENT OF THE NAVY NEAR TERM ENERGY EFFICIENT  
TECHNOLOGIES PROJECTS  
(Project No. D2009-D000AB-0170.002)

DODIG Recommendation 5a:

We recommend that the Commander, Naval Surface Warfare Center, Carderock Division-Ship Systems Engineering Station direct the posting of award notice for contract action N65540-08-D-0009-0007-02.

DON Response:

**Do Not Concur.** Award notice for contract action N65540-080D-0009-00007-02 was initially posted to Navy Electronic Commerce Online (NECO), as required per Navy guidance, on 03 February 2010.

<https://www.neco.navy.mil/synopsis/detail.aspx?id=251852>

Although Federal Business Opportunities (FedBiz) does not seem to show the Award notice from NECO, the error is a system error with NECO and not a procedural error with NSWC, Carderock.

Subsequent contract modifications were successfully transferred from NECO to FedBiz.

<https://www.fbo.gov/?s=opportunity&mode=form&id=2cf87dd675851b77562a2035d686a77f&tab=core&cvview=1>

All subsequent posting and reporting required actions were completed for modification 02. The contractor submitted a "Final" report in CY10 Q4 after a number of quarterly reporting cycles

Revised and  
renumbered as  
Recommendation  
3.a

DEPARTMENT OF THE NAVY RESPONSE  
TO  
DODIG DRAFT REPORT ON AMERICAN RECOVERY AND REINVESTMENT  
ACT-DEPARTMENT OF THE NAVY NEAR TERM ENERGY EFFICIENT  
TECHNOLOGIES PROJECTS  
(Project No. D2009-D000AB-0170.002)

DODIG Audit Recommendation 5b:

We recommend that the Commander, Naval Surface Warfare Center, Carderock Division-Ship Systems Engineering Station direct the modification of contract action N00178-04-D-4089 EHP1 43 to include all required Recovery Act clauses.

DON Response:

Concur. Although the clause titles are not specifically stated in the subject modification, the text of the modification states that FAR Clauses 52.203-15 and 52.244-6 were incorporated in Section I of this task order by reference and FAR Clause 52.204-11 was erroneously incorporated by full text. An administrative modification shall be issued to clearly state the clause titles of the three (3) aforementioned clauses and incorporate FAR Clause 52.204-11 by reference instead of full text.

Action completed on 18 Feb 11. Pertinent documents attached.

Revised and  
renumbered as  
Recommendation  
3.b





DEPARTMENT OF THE NAVY  
HEADQUARTERS UNITED STATES MARINE CORPS  
3000 MARINE CORPS PENTAGON  
WASHINGTON, DC 20350-3000

IN REPLY REFER TO:

7500

RFR-80

18 Mar 11

24

From: Commandant of the Marine Corps  
To: Deputy Assistant Secretary of the Navy, Acquisition and  
Logistics Management

Subj: COMMANDANT OF THE MARINE CORPS (CMC) OFFICIAL RESPONSE  
TO DEPARTMENT OF DEFENSE OFFICE OF INSPECTOR GENERAL  
(DODIG) DRAFT REPORT D2009-D000AB-0170.002, "AMERICAN  
RECOVERY AND REINVESTMENT ACT - DEPARTMENT OF THE NAVY  
NEAR TERM ENERGY-EFFICIENT TECHNOLOGIES PROJECTS," DATED  
FEBRUARY 15, 2011

Ref: (a) DODIG memo of February 15, 2011

Encl: (1) CMC Official Responses

1. Official responses required by the reference are provided at the enclosure.
2. Enclosure (1) was coordinated with Headquarters, U. S. Marine Corps, Programs and Resources Department and Marine Corps Systems Command.
3. The Marine Corps appreciates the opportunity to respond to the report.
4. If you have any questions about the responses, please contact [REDACTED], Headquarters, U. S. Marine Corps Senior Audit Liaison, email [REDACTED] or phone [REDACTED], DSN [REDACTED]

JOHN E. WISSLER  
Deputy Commandant  
for Programs and Resources

Copy to:  
NAVINGEN (N4)  
DMCS



UNITED STATES MARINE CORPS  
MARINE CORPS SYSTEMS COMMAND  
2200 LESTER ST  
QUANTICO, VIRGINIA 22134-6050

IN REPLY REFER TO:

DFM  
11 March 11

From: Commander, Marine Corps Systems Command  
To: Deputy Commandant for Programs and Resources, Fiscal  
Division Audit and Review Branch

Subj: COMMENTS ON DODIG DRAFT REPORT DATED 15 FEBRUARY 2011  
PROJECT NUMBER D2009-D000AB-0170.002 "AMERICAN RECOVERY  
AND REINVESTMENT ACT - DEPARTMENT OF THE NAVY NEAR TERM  
ENERGY - EFFICIENT TECHNOLOGIES PROJECTS"

Encl: (1) DODIG DRAFT REPORT DATED 15 FEBRUARY 2011  
PROJECT NUMBER D2009-D000AB-0170.002 "AMERICAN  
RECOVERY AND REINVESTMENT ACT - DEPARTMENT OF THE  
NAVY NEAR TERM ENERGY - EFFICIENT TECHNOLOGIES  
PROJECTS"

1. The subject DODIG Draft Report (enclosure (1)) was reviewed  
for technical accuracy. USMC comments are provided below.

a. Recommend that the sentence on page 12 "Direct the  
modification of contract actions M67854-08-A-5051 (order 0009),  
M67854-08-A-5023 (order 0004), M67854-07-D-5115 (order 0013),  
M67854-09-C-5113, and M67854-06-C-5062 (P00006) to include all  
required Recovery Act clauses" be replaced with "Direct the  
modification of contract actions M67854-08-A-5051 (order 0004),  
M67854-08-A-5023 (order 0009), M67854-07-D-5115 (order 0013),  
M67854-09-C-5113, and M67854-06-C-5062 (P00006) to include all  
required Recovery Act clauses".

b. Recommend that the sentence on page 19 "MARCORSYSCOM  
awarded two contract actions under this project for a total of  
\$733,569" be replaced with "MARCORSYSCOM awarded two contract  
actions under this project for a total of \$3.9 million".

c. Recommend that the sentence on page 20 "MARCORSYSCOM  
issued four contract actions, valued at \$2.7 million, for this  
project" be replaced with "MARCORSYSCOM issued six contract  
actions, valued at \$3.4 million, for this project".

d. Recommend that the sentence on page 22 "MARCORSYSCOM  
awarded one contract action, valued at \$2.2 million, for this  
project" be replaced with "MARCORSYSCOM awarded two contract  
actions, valued at \$2.4 million, for this project".

Encl (1)

Revised, page 15

Page 23

Revised, page 24

Page 26



Subj: COMMENTS ON DODIG DRAFT REPORT DATED 15 FEBRUARY 2011  
PROJECT NUMBER D2009-D000AB-0170.002 "AMERICAN RECOVERY  
AND REINVESTMENT ACT - DEPARTMENT OF THE NAVY NEAR TERM  
ENERGY - EFFICIENT TECHNOLOGIES PROJECTS"

2. The findings and recommendations in the subject DODIG Draft Report (enclosure (1)) were reviewed. The USMC response to the recommendations and the status of requested actions is provided below.

a. Review of Internal Controls: We identified an internal control weakness in DON's posting of solicitation and award notices for NTEET program contract actions. The Commanders Naval Air Systems Command (NAVAIR); Naval Surface Warfare Center, Carderock Division-Headquarters (NSWCCD/HQ); Naval Surface Warfare Center, Carderock Division- Ships System Engineering Station (NSWCCD/SSSES); and Marine Corps Systems Command (MARCORSYSCOM) should better facilitate the transparency of contract actions awarded under the Recovery Act and posted on Government Web sites by implementing Recommendations 2.a, 2.b, 3, 4, 5.a, 6.a, and 7.a, respectively. The Commanders, MARCORSYSCOM and Air Force Materiel Command (AFMC), should better facilitate the inclusion of required Recovery Act FAR clauses in DON NTEET contracts by implementing Recommendations 5.b, 6.b, and 7.b, respectively.

USMC Response: Concur. The internal control weakness identified on page 5 of enclosure (1) will also be officially addressed in the Marine Corps Systems Command 2011 Overall Managers Internal Control Program.

b. Recommendation 6.a: We recommend that the Commander, Marine Corps Systems Command direct the posting of:

(1) Award notices for contract actions M67854-08-A-5051 (order 0004), M67854-08-A-5023 (order 0009), and M67854- 06-C-5062 (P00006).

(2) Pre-solicitation notices for contract actions M67854-08-A-5051 (order 0004), M67854-08-A-5023 (order 0009).

(3) Appropriate descriptions to contract actions M67854-08-A-5051 (order 0004), and M67854-08-A-5023 (order 0009) of the Recovery Act work to be performed in Federal Business Opportunities and other required Web sites.

Revised

Renumbered as  
Recommendation  
4.a

Subj: COMMENTS ON DODIG DRAFT REPORT DATED 15 FEBRUARY 2011  
PROJECT NUMBER D2009-D000AB-0170.002 "AMERICAN  
RECOVERY AND REINVESTMENT ACT - DEPARTMENT OF THE NAVY  
NEAR TERM ENERGY - EFFICIENT TECHNOLOGIES PROJECTS"

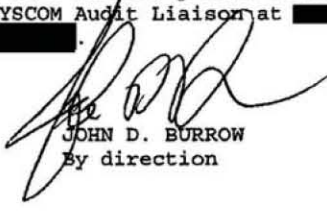
USMC Response: Concur. Recommendations (1) and (2) will be  
completed by 9 April 11. Recommendation (3) was completed on  
5 August 09.

c. Recommendation 6.b: We recommend that the Commander,  
Marine Corps Systems Command:

(1) Direct the modification of contract actions M67854-  
08-A-5051 (order 0009), M67854-08-A-5023 (order 0004), M67854-  
07-D-5115 (order 0013), M67854-09-C-5113, and M67854-06-C-5062  
(P00006) to include all required Recovery Act clauses.

USMC Response: Concur. These actions were completed in October  
09.

3. For questions regarding this matter, please contact  
[REDACTED], MARCORSYSCOM Audit Liaison at [REDACTED]  
email [REDACTED].

  
JOHN D. BURROW  
By direction

Revised and  
renumbered as  
Recommendation  
4.b

# Department of the Air Force Comments

Final Report  
Reference



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS AIR FORCE MATERIEL COMMAND  
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

17 Mar 11

MEMORANDUM FOR DOD/IG

FROM: AFMC/PK  
4375 Chidlaw Road  
Wright-Patterson AFB OH 45433-5001

SUBJECT: Draft Report on the American Recovery and Reinvestment Act--Department of the Navy Near Term Energy-Efficient Technologies Projects

References: (a) [REDACTED] e-mail, same subject, dated 15 Feb 11  
(b) Draft Report on the American Recovery and Reinvestment Act--Department of the Navy Near Term Energy-Efficient Technologies Projects dated 15 Feb 11

1. In accordance with reference (a), AFMC respectfully submits the following response to the DoD IG's draft recommendations on page 12, paragraph 7, of reference (b):

*We recommend that the Commander, Air Force Materiel Command:*

- a. Direct the posting of presolicitation notice for contract action F34601-03-D-0006-0007-04.*
- b. Direct the modification of contract action F34601-03-D-0006-0007-04 to include all required Recovery Act clauses.*

Response: At the time of the receipt of the Military Interdepartmental Purchase Request the Contracting Officer (CO) was not aware that American Recovery and Reinvestment Act (ARRA) funding was being utilized. Therefore the CO did not comply with the Recovery Act reporting requirements and omitted the pertinent Recovery Act clauses with the issuance of the order. The CO has since been made aware of the various Recovery Act terms that may identify MIPR's and PR's as being ARRA funded. The order has been completed; therefore AFMC is unable to comply with the two draft recommendations. In the future AFMC will strive to ensure COs are aware of special reporting requirements and special clauses before issuance of solicitations.

2. Please direct questions on AFMC ARRA related efforts to [REDACTED], HQ AFMC/PKQP, DSN [REDACTED], Comm [REDACTED].

  
THOMAS J. SNYDER, Col, USAF  
Deputy Director of Contracting

cc:  
SAF/AQCK

*War-winning capabilities ... on time, on cost*

Revised and  
renumbered as  
Recommendation 5

THIS PAGE INTENTIONALLY LEFT BLANK

THIS PAGE INTENTIONALLY LEFT BLANK





# Inspector General Department of Defense

